R K

FIG. 1A

(SEQ ID NO:1

`.:<u>:</u>

a

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S

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♥ → ACT CAC GGT CAA GCT AAG GCG AAG AGT GGG TGG CTG AAG CCA TAC TAT TTT ATA GAA (SEQ ID NO:2)→ M P w ĸ I T N Q. E E L M E S R K D TTA ATG GAA AGC AGA AAA GAC ATC ACA AAC CAA GAA GAA CTT TGG AAA ATG AAG CCT AGG 61 G E T .: S н к n E E D n Y L Τ. AGA AAT TTA GAA GAA GAC GAT TAT TTG CAT AAG GAC ACG GGA GAG ACC AGC ATG CTA AAA 121 D E F n C Q T н т. н AGA CCT GTG CTT TTG CAT TTG CAC CAA ACA GCC CAT GCT GAT GAA TTT GAC TGC CCT TCA 181 F р W н L P ĸ т 0 E L 0 т. 0 H GAA CTT CAG CAC ACA CAG GAA CTC TTT CCA CAG TGG CAC TTG CCA ATT AAA ATA GCT GCT 241 ν т н P T F L т L L R E ATT ATA GCA TCT CTG ACT TTT CTT TAC ACT CTT CTG AGG GAA GTA ATT CAC CCT TTA GCA 301 v T. P L V I N K 0 O Y F Y K 1 Р I S H ACT TCC CAT CAA CAA TAT TTT TAT AAA ATT CCA ATC CTG GTC ATC AAC AAA GTC TTG CCA 361 v ĭ A P a T L L A L L ATG GTT TCC ATC ACT CTC TTG GCA TTG GTT TAC CTG CCA GGT GTG ATA GCA GCA ATT GTC 421 D K ĸ W L w F P н Y ĸ N G T ĸ CAA CTT CAT AAT GGA ACC AAG TAT AAG AAG TTT CCA CAT TGG TTG GAT AAG TGG ATG TTA 481 I 9 F F A v L н А P F G L L S ACA AGA AAG CAG TTT GGG CTT CTC AGT TTC TTT TTT GCT GTA CTG CAT GCA ATT TAT 541 Y R Y к L L N w A Y S M Þ R CTG TCT TAC CCA ATG AGG CGA TCC TAC AGA TAC AAG TTG CTA AAC TGG GCA TAT CAA CAG 601 R M E AWIEH D ν W N K E n GTC CAA CAA AAT AAA GAA GAT GCC TGG ATT GAG CAT GAT GTT TGG AGA ATG GAG ATT TAT 661 A v L

TTG GCA ATA CTG GCT CTG TTG GCT GTG ACA TCT ATT CCA 721 TCT CTG GGA ATT GTG GGA s K F H Y т Q_ WRE s D S L т TCT GTG AGT GAC TCT TTG ACA TGG AGA GAA TTT CAC TAT ATT CAG AGC AAG CTA GGA ATT 781 N I A I H A L G ·T GTT TCC CTT CTA CTG GGC ACA ATA CAC GCA TTG ATT TTT GCC TGG AAT AAG TGG ATA GAT 841 TPPTF F v W Y I TTC CTT CCA ATT ATA AAA CAA TTT GTA TGG TAT ACA CCT CCA ACT TTT ATG ATA GCT GTT 901 к

GTT GTC CTG ATA TTT AAA AGC ATA CTA TTC CTG CCA TGC TTG AGG AAG AAG ATA CTG AAG 961 I С т E E D v T к I N к W н G ATT AGA CAT GGT TGG GAA GAC GTC ACC AAA ATT AAC AAA ACT GAG ATA TGT TCC CAG TTG 1021

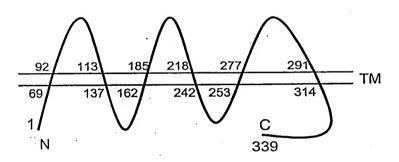
T.

L P C L

TAG AAT TAC TGT TTA CAC ACA TTT TTG TTC AAT ATT GAT ATA TTT TAT CAC CAA CAT TTC 1081 1141

FIG. 1B

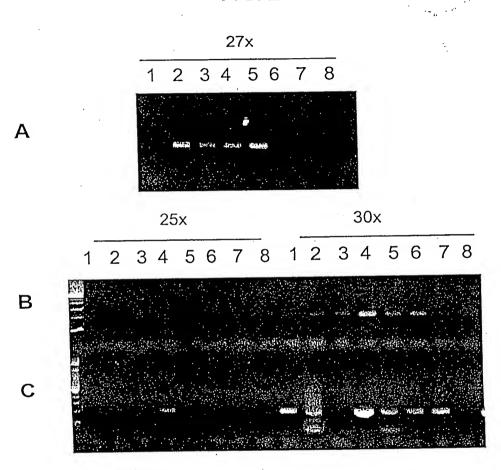
Extracellular



Intracellular

FIG. 1C

FIG. 2



Panels:

A

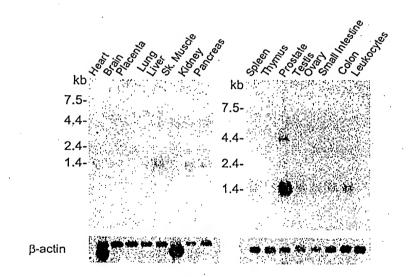
- 1. Brain
- 2. Prostate
- 3. LAPC-4 AD
- 4. LAPC-4 AI
- 5. LAPC-9 AD
 - 6. HeLa
 - 7. Murine cDNA
 - 8. Neg. control

В

- 1. Brain
- 2. Heart
- 3. Kidney
- 4. Liver
- 5. Lung
- 6. Pancreas
- 7. Placenta
- 8. Skeletal Muscle

- 1. Colon
- 2. Ovary
- 3. Leukocytes
- 4. Prostate
- 5. Small Intestine
- 6. Spleen
- 7. Testis
- 8. Thymus

FIG. 3A



G6 fetal thymus

G7 fetal lung

G5 fetal spleen

G3 fetal kidney

34 fetal liver

G2 fetal heart

C8 stomach

FIG. 3E

D4 pituitary gland

D3 pancreas

A3 caudate nucleus

42 amygdala

A1 brain

A4 cerebellum

D1 testis D2 ovary

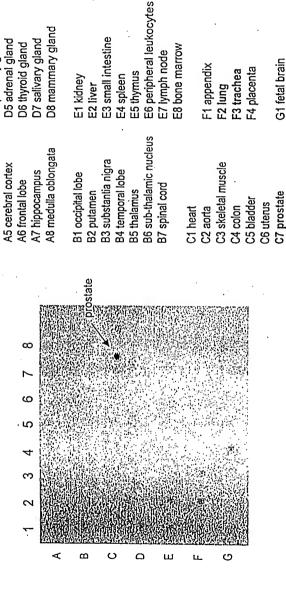


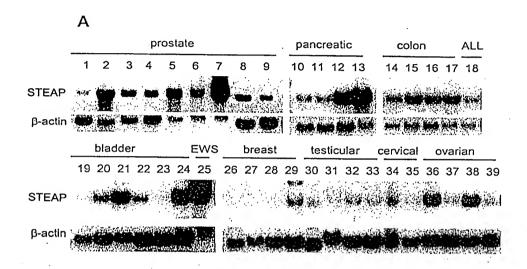
FIG. 4-1

ATACTATTTTATAGAATTAATGGAAAGCAGAAAAGACATCACAAACCAAGAAGAACTTTGGAAAATGAAGCCTAGG AGAAATTTAGAAGAAGACGATTATTTGCATAAGGACACGGGAGAGACCAGCATGCTAAAAAAGACCTGTGCTTTTGC GTGGCACTTGCCAATTAAAATAGCTGCTATTATAGCATCTCTGACTTTTCTTTACACTCTTCTGAGGGAAGTAATT CACCCCTTAGCAACTTCCCATCAACAATATTTTATAAAATTCCAATCCTGGTCATCAACAAAGTCTTGCCAATGG TTTCCATCACTCTCTTGGCATTGGTTTACCTGCCAGGTGTGATAGCAGCAATTGTCCAACTTCATAATGGAACCAA GTATAAGAAGTTTCCACATTGGTTGGATAAGTGGATGTTAACAAGAAAGCAGTTTGGGCTTCTCAGTTTCTTTTTT GCTGTACTGCATGCAATTTATAGTCTGTCTTACCCAATGAGGCGATCCTACAGATACAAGTTGCTAAACTGGGCAT ATCAACAGGTCCAACAAAATAAAGAAGATGCCTGGATTGAGCATGATGTTTGGAGAATGGAGATTTATGTGTCTCT AGAGAATTTCACTATATTCAGGT<u>AAAT</u>AATATATAAAATAACCCTAAGAGGTAAATCTTCTTTTTGTGTTTATGAT ATAGAATATGTTGACTTTACCCCATAAAAAATAACAAATGTTTTTCAACAGCAAAGATCTTATACTTGTTCCAATT CTCTGTTGCCCATGCTGGAGTACAGTGGCACGATCTCGGCTCACTGCAACCTGCGCCTCCTGGGTTCAGGCGATTC TCTTGCCTCAGCCTCCTGAGTAGCTGGGATTACAGGCACCCATCACCATGTCCAGCTAATTTTTGTATTTTAGTA GAGACAGGGTTTTCCCATGTTGGCCAGGCTGGTCTCGATCTCCTGACCTCAAATGATCCGCCCACCTCGGCCTCCC AAAGTGCTGGGATGACAGTTGTGAGCCACCACACTCAGCCTGCTCTTTCTAATATTTGAAACTTGTTAGACAATTT TGTCACCTGAATTTAGTAATGCCTTTTATGTTACACAACTTAGCACTTTCCAGAAACAAAAACTCTCCCTTGAAA TAATAGAGTTTTTATCTACCAAAGATATGCTAGTGTCTCATTTCAAAGGCTGCTTTTTCCAGCTTACATTTTATAT ACTTACTCACTTGAAGTTTCTAAATATTCTTGTAATTTTAAAACTATCTCAGATTTACTGAGGTTTATCTTCTGGT GGTAGATTATCCATAAGAAGAGTGATGTGCCAGAATCACTCTGGGATCCTTGTCTGACAAGATTCAAAGGACTAAA

FIG. 4-2

TTTAATTCAGTCATGAACACTGCCAATTACCGTTTATGGGTAGACATCTTTGGAAATTTCCACAAGGTCAGACATT CGCAACTATCCCTTCTACATGTCCACACGTATACTCCAACACTTTATTAGGCATCTGATTAGTTTGGAAAGTATGC CTCCATCTGAATTAGTCCAGTGTGGCTTAGAGTTGGTACAACATCTCACAGAATTTCCTAATTTTGTAGGTTCAG CCTGATAACCACTGGAGTTCTTTGGTCCTCATTAAATAGCTTTCTTCACACATTGCTCTGCCTGTTACACATATGA TGAACACTGCTTTTTAGACTTCATTAGGAATTTAGGACTGCATCTTGACAACTGAGCCTATTCTACTATATGTACA ATACCTAGCCCATAATAGGTATACAATACACATTTGGTAAAACTAATTTTCAACCAATGACATGTATTTTTCAACT AGTAACCTAGAAATGTTTCACTTAAAATCTGAGAACTGGTTACACTACAAGTTACCTTGGAGATTCATATATGAAA ACGCAAACTTAGCTATTTGATTGTATTCACTGGGACTTAAGAATGCGCCTGAATAATTGTGAGTTCGATTTGTTCT GGCAGGCTAATGACCATTTCCAGTAAAGTGAATAGAGGTCAGAAGTCGTATAAAAGAGGTGTTGTCAGAACACCGT TGAGATTACATAGGTGAACAACTATTTTTAAGCAACTTTATTTGTGTAGTGACAAAGCATCCCAATGCAGGCTGAA ATGTTTCATCACATCTCTGGATCTCTCTATTTTGTGCAGACATTGAAAAAATTGTTCATATTATTTCCATGTTATC CATTAGTCGCCTTCACAACTGATAAAGATCACTGAAGTCAAATTGATTTTTGCTATAATCTTCAATCTACCTATAT TTCACTTAGACAGCTTGGAGACAAGAAATTACCCAAAAGTAAGGTGAGGAGGATAGGCAAAAAAGAGCAGAAAGATG TGAATGGACATTGTTGAGAAATGTGATAGGAAAACAATCATAGATAAAGGATTTCCAAGCAACAGAGCATATCCAG ATGAGGTAGGATGGGATAAACTCTTATTGAACCAATCTTCACCAATTTTGTTTT<u>TCTTTTGCAGA</u>GCAAGCTAGGA CCTGCCATGCTTGAGGAAGAAGATACTGAAGATTAGACATGGTTGGGAAGACGTCACCAAAATTAACAAAACTGAG ATATGTTCCCAGTTGTAGAATTACTGTTTACACACATTTTTGTTCAATATTGATATATTTTATCACCAACATTTCA

FIG. 5



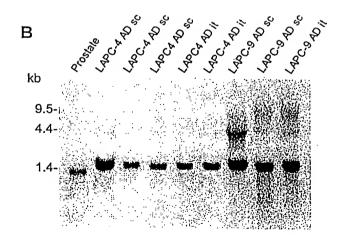


FIG. 6

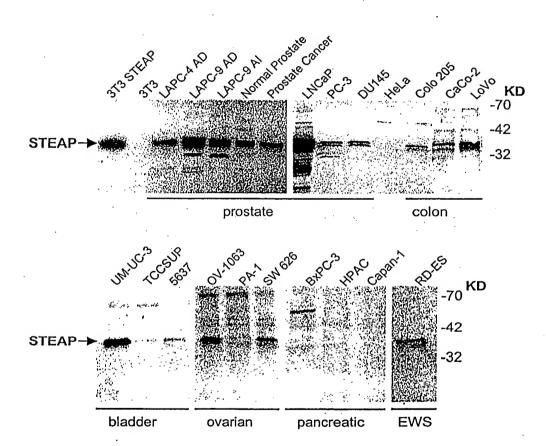
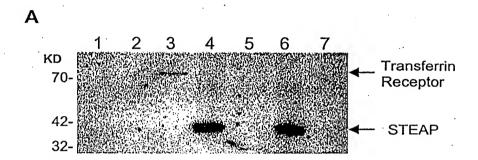


FIG. 7



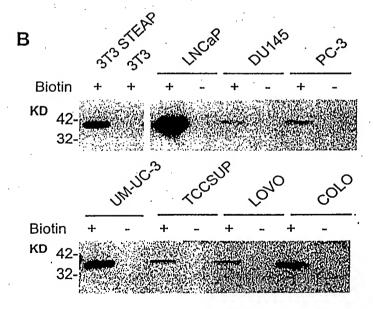


FIG. 9

51	ĠAC	TTT	10 TAC		ATT			GAG			ΑΛΤ		ACC			ΑТА	GTT	55 GCC
•																		
	Asp	Phe	Tyr 64	Lys	Ile	Pro 73	Ile	Glu	Ile 82	Val	Asn	Lys 91	Thr	Leu	Pro 100	Ile	Val	Ala 109
	ATT	ACT	TTG	CTC	TCC	CTA	GTA	TAC	СТС	GCA	GGT	CTT	CTG	GCA	GCT	GCT	TAT	CAA
			118			127			136			145			154		Tyr	163
			TAC		ACC	AAG	TAT	AGG	AGA	TTT	CCA	CCT	TGG	TTG	GAA	ACC	TGG	TTA
	Leu	Tyr	Tyr 172	Gly		181			190			199			208		Trp	217
	CAG	TGT	AGA	AAA	CAG	CTT	GGA	TTA	CTA	AGT		TTC		GCT	ATG	GTC	CAT	GTT
		-	226			235			244			253			262		His	271
	GCC	TAC	AGC	CTC	TGC	TTA	CCG	ATG	AGA	AGG	TCA	GAG	AGA				CTC	
	Ala	Tyr	Ser 280	Leu	Cys	Leu 289	Pro	Met	Arg 298		Ser	G1 u	Arg				Leu	
	ATG	GCT		CAG	CAG	GTT	CAT	GCA	AAT	ATT			TCT	TGG	AAT	GAG	GAA	GAA
	Met	Λla	Tyr 334	Gln	Gln	Val 343		Λla	Asn 352	Ile	Glu	Asn 361	Ser	Trp	Asn 370	Glu	Glu	G1u 379
	GTT	TGG	AGA	ATT		ATG	TAT		TCC		GGC		ATG	AGC		GGC	TTA	CTT
			388		Glu	397	Tyr	Ile	Ser 406	Phe		415			424		Leu	433
	TCC	CTC	CTG	GCA	GTC	ACT	TCT	ATC	CCT	TCA	GTG	AGC	AAT	GCT	TTA	AAC	TGG	AGA.
	Ser	Leu	Leu 442	Ala	Val	Thr 451	Ser	Ile	Pro 460	Ser	Val	Ser 469	Asn	Ala	Leu 478	Asn	Trp	Arg 487
	GAA	TTC	AGT	TTT	ATT	CAG	TCT	ACA	CTT	GGA	TAT	GTC	GCT	CTG	CTC	ATA	AGT	ACT
			496			505			514							Ile	Ser	Thr
	TTC	CAT	GTT	TTA	ATT	TAT	GGA	TGG	ΛAA	CGA	GCT	3' (SEQ ID	NO:7)	•			
	Phe	His	Val	Leu	Ile	Tyr	Gly	Trp	Lys	Arg	Ala	(SEQ	ID NO	:8)			•	

FIG. 10

tgagaaggtcagagagat (SEO ID NO:9)

STEAP-2, 98P4B6 SSH fragment TTTGCAGCTTTGCAGATACCCAGACTGAGCTGGAACTGGAATTTGTCTTCCTATTGACTCTACTTCTTTAAAAGCG GCTGCCCATTACATTCCTCAGCTGTCCTTGCAGTTAGGTGTACATGTGACTGAGTGTTGGCCAGTGAGATGAAGTC TCCTCAAAGGAAGGCAGCATGTGTCCTTTTT (SEQ ID NO:10)

R80991 (placental EST)
ggccgcggcänccgctacqacctggtcaacctggcagtcaagcaggtcttggccanacaagagccacctctggtg
aaggaggaggtctggcgatggagatctacctctccctgggagtgtcagctcaggcacgttgtccctgctggccg
tgacctcactgcgtccattgcaactcgctcaactggaggagttcagcttcgttcagtcctcactgggctttgt
ggccntcgtgctgagcacactncacacgctcacctacggctggaccggcgcttcgaggagagagcgctacaagttc
tacctncctcccaccttcacgntcacgctggtgccctggttcgttcatcctgggcaaagccctgtttntac
tgccttgcattcagccgnaga(SEQID NO:12)

FIG. 11A

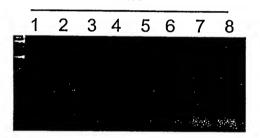
STEAP-1	106	FIRIPILVINKVLPMVSITLLALVILPGVIAAIVQLHNGTRIKKFPHWLDKWMLIKK	7 ° G
STEAP-2	2	FYKIPIEIVNKTLPIVAITLLSLVYLAGLLAAAYQLYYGTKYRRFPPWLETWLQCRKQ)LG
		***** ** ** * *** *** * ** ** ** ** * **	*
STEAP-1	166	LLSFFFAVLHAIYSLSYPMRRSYRYKLLNWAYQQVQQNKEDAWIEHDVWRMEIYVSLG	3IV
STEAP-2	62	LLSFFFAMVHVAYSLCLPMRRSERYLFLNMAYQQVHANIENSWNEEEVWRIEMYISFO	ЗIМ
		****** * *** **** ** ** *** (Portion of SEQ ID NO:2)	ı *
STEAP-1	226	GLAILALLAVTSIPSVSDSLTWREFHYIQSKLGIVSLLLGTIHALIFAWNK	
STEAP-2	122	SLGLLSLLAVTSIPSVSNALNWREFSFIQSTLGYVALLISTFHVLIYGWKR	
		(Portion of SEQ ID NO:8)	

FIG. 11B

0000	180 76 0	270 166 68 82	·
1 IS 16 30 31 45 46 60 61 75 76 90 1 MESRXDITNQEELKK MCPRRALEEDDYLJK DIGETSMLKRPVLLH LHQTAHADEFDCPSE LQHTQELFPQWHLPI KIAAIIASLTPLYTL 2 3 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	91 :05 106 120 121 135 136 150 151 165 166 180 -1 LREVIHPLATSSOOY FYKIPIHVINGVER VAITLALVYIHOGYH BAIVQIHAGIKYKKE BAMLDKWMLTRKOFG ELSFFRAVHVAKSH -2	181 195 196 210 211 225 226 240 241 255 256 270 -1 SYEMERESYRYNCEAN AYOOVOONKEDAWIE HOVMRMEIYVSIGIY GIAILAATSIPS VSDSLYMREENKIIGS REGIVSLLIAGTIHAU -2 CLEMERESERYL-EAN AYOOVUANIENSWAE ESVARNIERFINK SIGILSLIAVISIES VSBALMWEENSFIOS TEGYVALLISTERVU -3	271 285 286 300 301 315 316 330 331 345 346 360 -1 IPANKWIDIKQFW YIPPIBAINVELPIN KLIFELEGARK KILKIRHGMEDNYKI NKTEICSQL 339 (SEQ ID NO.2) -2 INGMESA
STEAP-1 STEAP-2 STEAP-3 STEAP-4	STEAP-1 STEAP-2 STEAP-3 STEAP-4	STEAP-1 STEAP-2 STEAP-3 STEAP-4	STEAP-1 STEAP-2 STEAP-3 STEAP-4

FIG. 14A

26x



- 1. Brain
- 2. Prostate
- 3. LAPC-4 AD
- 4. LAPC-4 AI
- 5. LAPC-9 AD
- 6. HeLa
- 7. Murine cDNA
- 8. Neg control

FIG. 14B

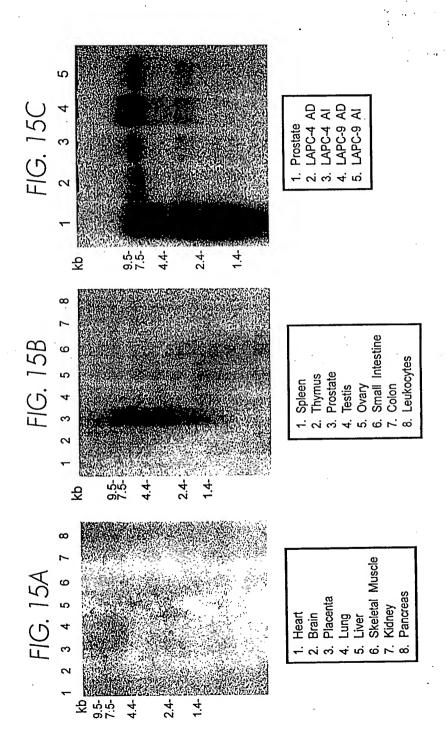




- 1. Colon
- 2. Ovary
- 3. Leukocytes
- 4. Prostate
- 5. Small Intestine 6. Spleen
- 7. Testis
- 8. Thymus

30x

25x



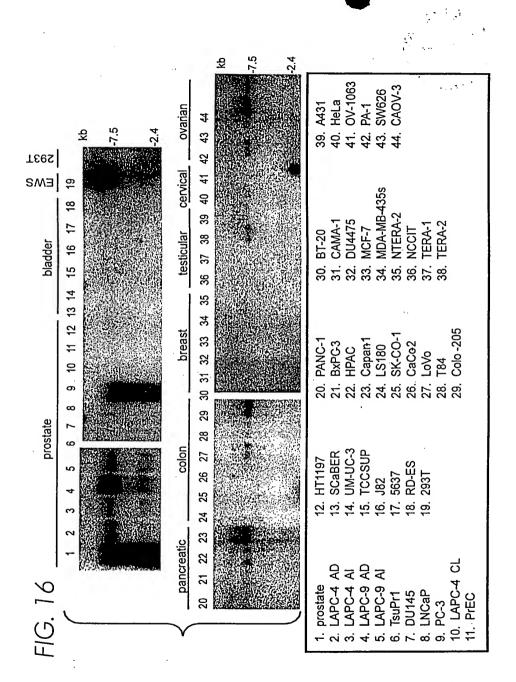


FIG. 17

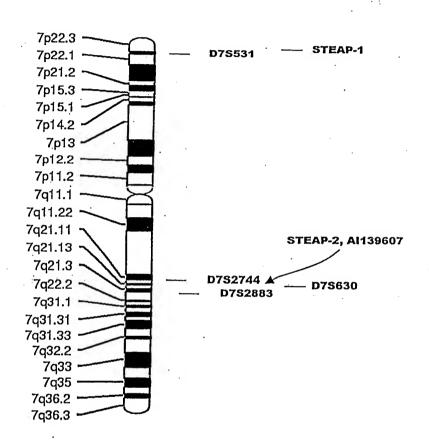
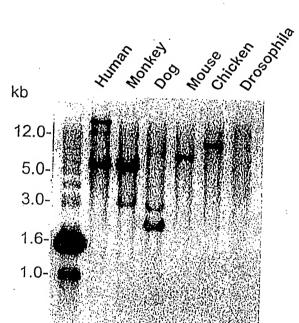
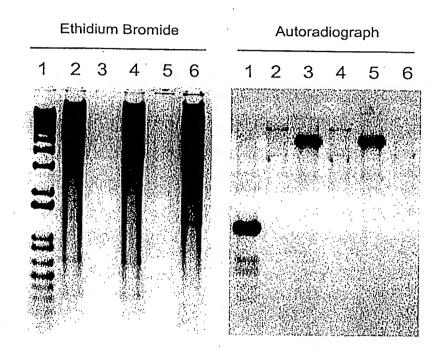


FIG. 19







Lanes

- 1) 1kb ladder
- 2) human female genomic
- 3) 12P11 BAC mus
- 4) human female genomic
- 5) 12P11 BAC mus
- 6) 3T3